



CHAPTER 3

THE RESIDENTIAL SEGREGATION OF AMERICAN INDIANS AND ALASKA NATIVES: 1980-2000

THE RESIDENTIAL SEGREGATION OF AMERICAN INDIANS AND ALASKA NATIVES: 1980-2000

Discussing the metropolitan residential segregation of American Indians and Alaska Natives is difficult because of the group's relatively small population and the fact that many still live on rural American Indian reservations and in Alaska Native villages. Of the 4.1 million American Indians and Alaska Natives (1.5 percent of the total population) counted in Census 2000, 1.4 million, or 34 percent, lived outside metropolitan areas.¹ Another challenge arose with the Census 2000 method of measuring race that allowed people to identify themselves as being of more than one race. In this chapter we focus on people identified as American Indian or Alaska Native alone or in combination with another race group. Appendix A shows residential segregation indexes for 2000 for those who just identified as being of this group alone.

Because of the relatively small total metropolitan population of American Indians and Alaska Natives, only 13 metropolitan areas qualified for our analysis (MAs that have at least 3 percent or 20,000 or

more American Indian and Alaska Native population in 1980, as discussed in chapter 2).² The ten metropolitan areas that had at least 3 percent or more American Indian and Alaska Native population in 1980, in decreasing percentage order, using 2000 percentages, were: Tulsa, OK (10.7 percent); Anchorage, AK (10.4 percent); Rapid City, SD (9.9 percent); Fort Smith, AR-OK (8.0 percent); Lawton, OK (7.0 percent); Albuquerque, NM (6.6 percent); Great Falls, MT (5.7 percent); Yakima, WA (5.6 percent); Bellingham, WA (3.8 percent); and Yuma, AZ (2.2 percent in 2000, though 3.6 percent in 1980). The other three metropolitan areas included in this analysis were Oklahoma City, OK (6.6 percent in 2000, though 2.9 percent in 1980); Phoenix-Mesa, AZ (2.8 percent in 2000); and Los Angeles-Long Beach, CA (1.5 percent in 2000).

Table 3-1 illustrates the extent of residential segregation of American Indians and Alaska Natives in 1980, 1990, and 2000. It has the weighted average of American Indian and Alaska Native segregation in all metropolitan areas and in the 13 "selected" areas that meet the population criteria described above. These 13 metropolitan areas accounted

for only 12.7 percent of all U.S. American Indian and Alaska Natives and only 19.4 percent of metropolitan American Indian and Alaska Natives.

The most widely used measure of residential segregation, dissimilarity, indicates a reduction in American Indian and Alaska Native segregation in both decades — for all metropolitan areas and selected metropolitan areas.³ The overall 1980-2000 reduction was 11 percent for all metropolitan areas and 6 percent for the selected metropolitan areas. In all metropolitan areas, the reduction in dissimilarity was larger in the 1990s than the 1980s, while for the selected metropolitan areas, the reduction was more even.⁴

The measure of clustering, spatial proximity, also showed a reduction of 10.0 percent for all metropolitan areas and 15.4 percent for selected metropolitan areas over the 1980 to

¹ The 2000 American Indian and Alaska Native population figure includes all people who identified as American Indian or Alaska Native alone or in combination with another race. The number of people who identified as American Indian or Alaska Native alone in 2000 was 2.5 million. Forty-nine (48.7) and 44.8 percent lived in nonmetropolitan areas in 1980 and 1990, respectively, when using 2000 MA boundaries.

² In 1980 and 1990, this population was called American Indians, Eskimos, and Aleuts.

³ Using the approach described in Chapter 2 to determine substantive changes as 1 percent of the index range, the following critical values are used: dissimilarity, 0.004; isolation, 0.004; delta, 0.005; absolute centralization, 0.008; spatial proximity, 0.015.

⁴ Appendix A shows that dissimilarity for American Indians and Alaska Natives is the one index that shows a different trend for those identifying themselves as American Indian and Alaska Native alone versus in combination with another racial group — those identifying as American Indian and Alaska Native alone are more residentially segregated in metropolitan areas than indicated above for the alone or in combination group.

Table 3-1.

Descriptive Statistics for Residential Segregation Indexes for American Indians and Alaska Natives: 1980, 1990, and 2000

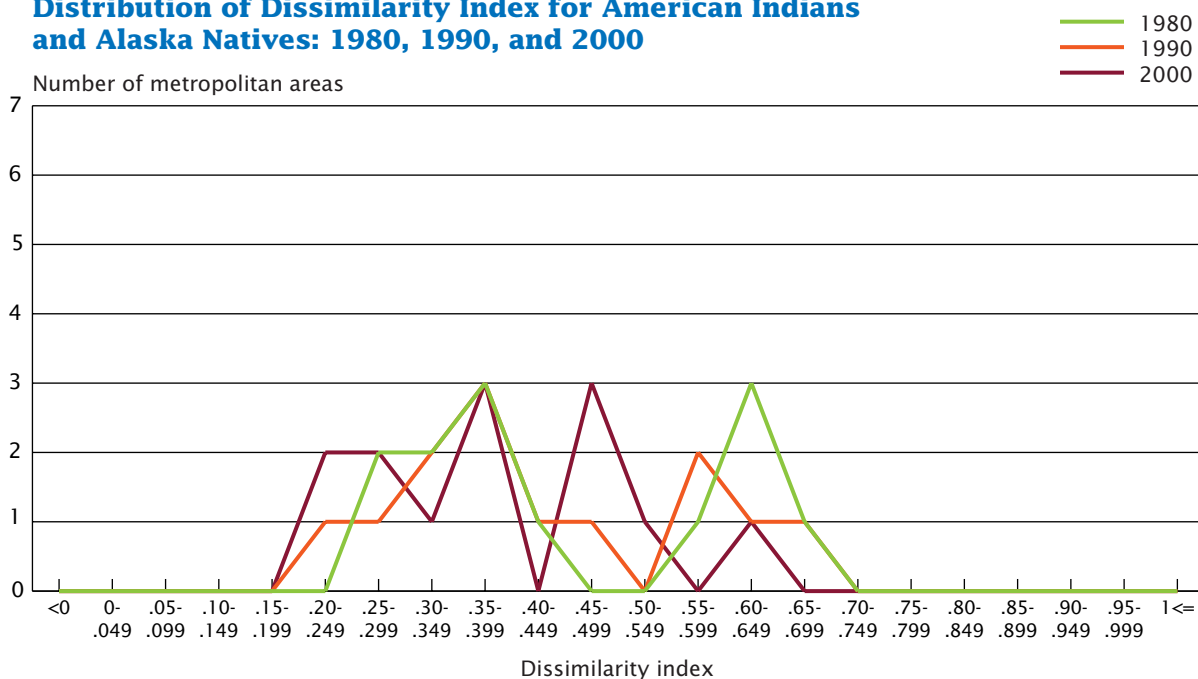
Index, year, and percent change	All metropolitan areas (weighted average)	Selected metropolitan areas					
		Weighted average	Minimum	25th percentile	Median	75th percentile	Maximum
Dissimilarity Index							
1980.....	0.373	0.414	0.252	0.257	0.351	0.602	0.655
1990.....	0.368	0.404	0.228	0.270	0.390	0.562	0.667
2000.....	0.333	0.390	0.213	0.237	0.472	0.474	0.607
Percent change							
1980-1990.....	-1.4	-2.5	-9.3	5.2	10.8	-6.7	1.8
1990-2000.....	-9.5	-3.6	-6.8	-12.2	21.3	-15.7	-9.0
1980-2000.....	-10.8	-6.0	-15.5	-7.6	34.4	-21.3	-7.4
Isolation Index							
1980.....	0.082	0.177	0.037	0.054	0.080	0.401	0.505
1990.....	0.102	0.188	0.050	0.079	0.107	0.349	0.463
2000.....	0.103	0.205	0.092	0.161	0.172	0.261	0.416
Percent change							
1980-1990.....	24.0	5.9	35.4	46.2	33.0	-13.0	-8.3
1990-2000.....	0.8	9.3	85.0	105.0	61.0	-25.2	-10.2
1980-2000.....	25.0	15.8	150.6	199.8	114.3	-34.9	-17.7
Delta Index							
1980.....	0.695	0.673	0.454	0.561	0.711	0.788	0.924
1990.....	0.685	0.674	0.442	0.552	0.658	0.808	0.918
2000.....	0.676	0.699	0.451	0.642	0.716	0.813	0.892
Percent change							
1980-1990.....	-1.4	0.2	-2.6	-1.5	-7.5	2.5	-0.7
1990-2000.....	-1.4	3.7	2.1	16.3	8.8	0.6	-2.8
1980-2000.....	-2.8	3.8	-0.5	14.6	0.6	3.1	-3.5
Absolute Centralization Index							
1980.....	0.622	0.627	0.039	0.560	0.665	0.783	0.908
1990.....	0.619	0.646	0.059	0.583	0.603	0.828	0.904
2000.....	0.611	0.658	0.152	0.578	0.643	0.817	0.882
Percent change							
1980-1990.....	-0.5	3.0	50.7	4.2	-9.3	5.8	-0.5
1990-2000.....	-1.2	1.8	159.5	-0.8	6.7	-1.3	-2.4
1980-2000.....	-1.7	4.9	291.3	3.3	-3.3	4.4	-2.9
Spatial Proximity Index							
1980.....	1.197	1.376	1.005	1.014	1.031	1.925	2.785
1990.....	1.244	1.466	1.006	1.016	1.054	2.089	3.049
2000.....	1.077	1.164	1.017	1.031	1.051	1.356	1.666
Percent change							
1980-1990.....	4.0	6.5	0.1	0.2	2.2	8.5	9.5
1990-2000.....	-13.5	-20.6	1.1	1.4	-0.3	-35.1	-45.4
1980-2000.....	-10.0	-15.4	1.2	1.6	1.9	-29.6	-40.2

Note: Selected Metropolitan Areas (13 of 330) are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. Higher values indicate more segregation; the reference group is White non-Hispanic. Segregation estimates are weighted by the size of the American Indian and Alaska Native population.

Source: U.S. Census Bureau, Census 1980, 1990, and 2000 Summary File 1.

Figure 3-1a.

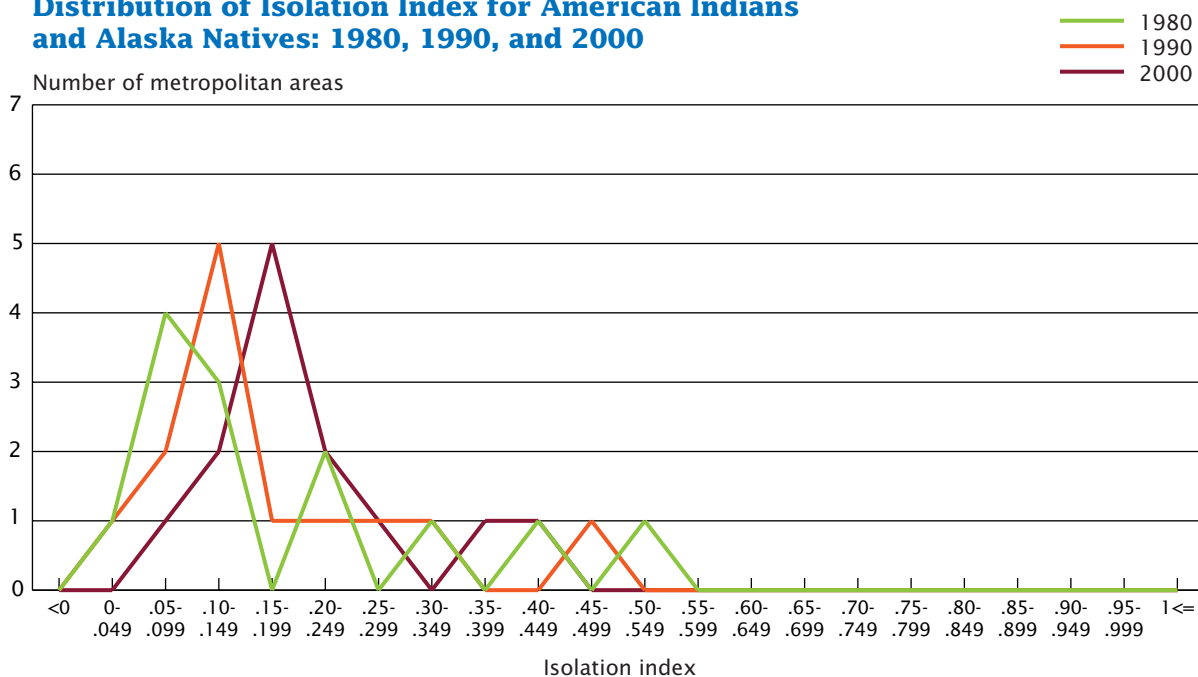
Distribution of Dissimilarity Index for American Indians and Alaska Natives: 1980, 1990, and 2000



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

Figure 3-1b.

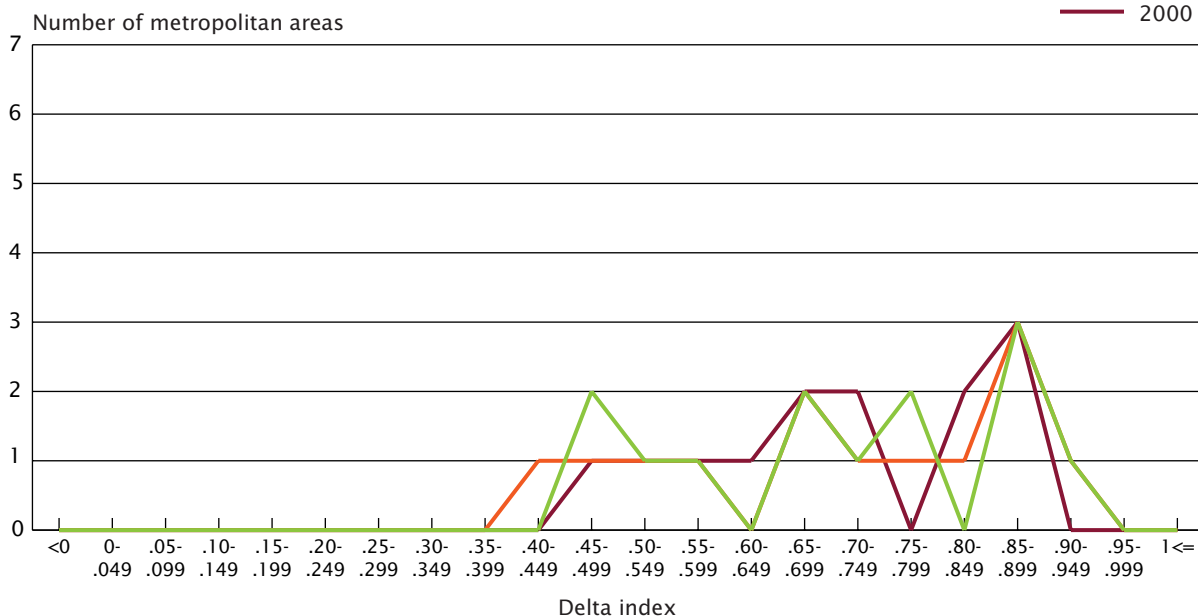
Distribution of Isolation Index for American Indians and Alaska Natives: 1980, 1990, and 2000



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

Figure 3-1c.

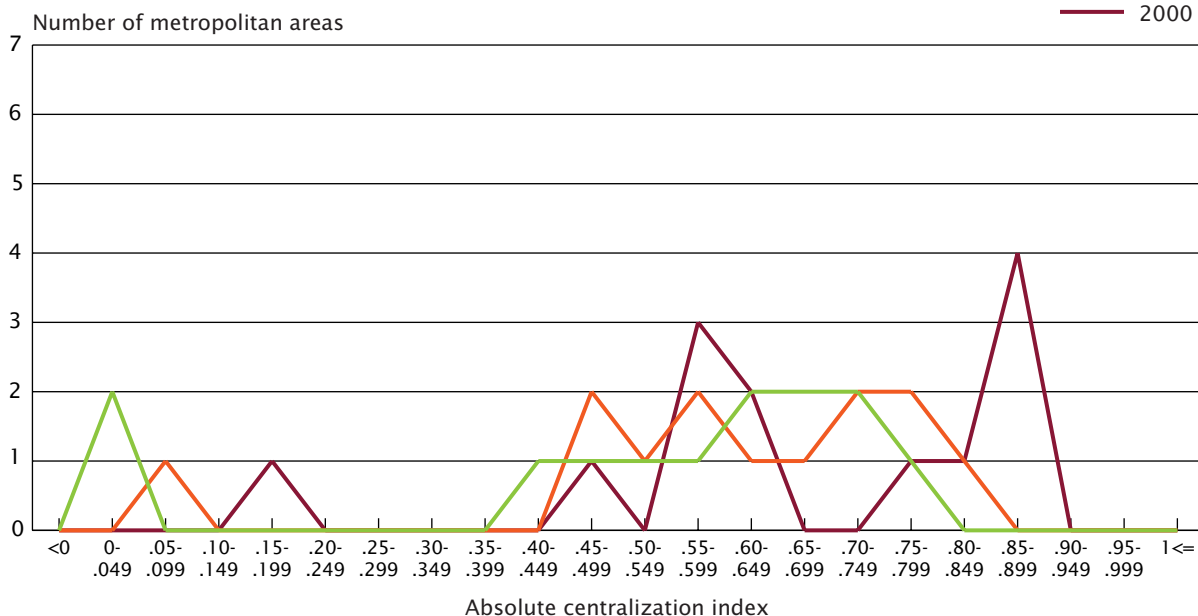
Distribution of Delta Index for American Indians and Alaska Natives: 1980, 1990, and 2000



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

Figure 3-1d.

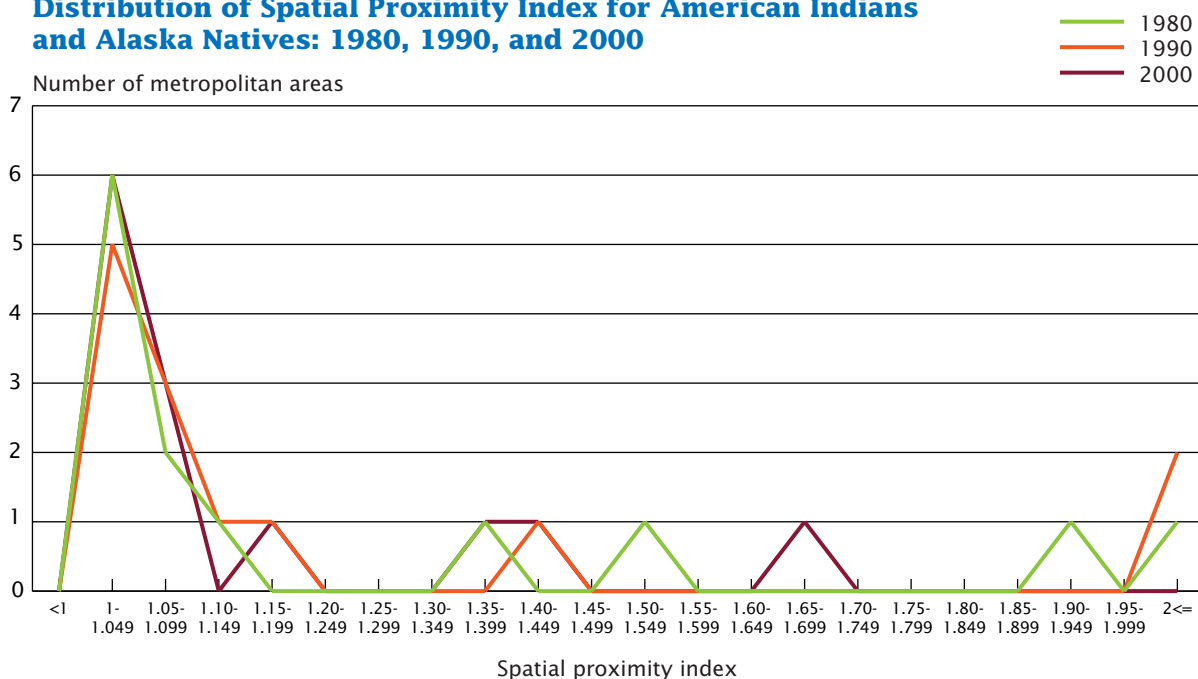
Distribution of Absolute Centralization Index for American Indians and Alaska Natives: 1980, 1990, and 2000



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

Figure 3-1e.

Distribution of Spatial Proximity Index for American Indians and Alaska Natives: 1980, 1990, and 2000



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

2000 period, with large declines in the 1990 to 2000 period overwhelming small increases in the 1980s. Isolation is the one measure which showed increases among both all and selected metropolitan areas between 1980 and 2000. Delta and absolute centralization showed mixed results, with declines among all metropolitan areas, but increases when only the selected MAs were considered.⁵

⁵ As noted in Appendix A, American Indians and Alaska Natives are the one group for whom it matters, albeit modestly, as to whether group population counts include only those reporting being of that group "alone," vs. "alone or in combination" with another group. Whereas declines in segregation from 1980 to 2000 are registered across four of the five indexes for this group when the "alone or in combination" scheme is used, and all metropolitan areas are considered, this number falls to 3 when the "alone" category is used.

This mixed story seems to take place throughout the distribution of segregation, though different indexes display different patterns. The fact that there are only 13 selected metropolitan areas contributes to the skewed distributions shown in Figures 3-1a through 3-1e.

Table 3-2 shows how trends in segregation vary by metropolitan area characteristics. The middle-sized metropolitan areas (500,000 to 999,999 population) had lower residential segregation than larger or smaller ones across all five indexes, with the sole exception of the absolute centralization index in 1980. In all years, the four metropolitan areas in Oklahoma (in the South region) had substantially

lower levels of residential segregation for all five indexes than the eight in the West.

There is no clear pattern between segregation and quartiles of percent American Indian/Alaska Native in the metropolitan area. American Indians and Alaska Natives were more likely to be evenly spread (dissimilarity index) but more likely to be centralized (absolute centralization index) in metropolitan areas with a low percentage (under 3 percent) or a higher percentage (over 4.4 percent) of American Indians and Alaska Natives. As the percentage of the group increases, they are less likely to share common neighborhoods (isolation index) with non-Hispanic Whites, but when

Table 3-2.
**Residential Segregation Indexes for American Indians and Alaska Natives by
Characteristics of Selected Metropolitan Areas: 1980, 1990, and 2000**

(Weighted averages)

Characteristic	Number of metropolitan areas	Dissimilarity index			Isolation index			Delta index			Absolute centralization index			Spatial proximity index		
		1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
Selected metropolitan areas	13	0.414	0.404	0.390	0.177	0.188	0.205	0.673	0.674	0.699	0.627	0.646	0.658	1.376	1.466	1.164
Region																
Northeast	0	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Midwest	1	0.398	0.399	0.384	0.110	0.132	0.177	0.924	0.918	0.885	0.908	0.899	0.871	1.049	1.053	1.050
South	4	0.286	0.283	0.253	0.076	0.101	0.144	0.584	0.587	0.587	0.530	0.542	0.561	1.036	1.051	1.053
West	8	0.487	0.488	0.465	0.236	0.250	0.239	0.715	0.726	0.755	0.673	0.709	0.706	1.574	1.769	1.228
Population Size																
1 Million or more ...	2	0.461	0.481	0.483	0.181	0.205	0.208	0.742	0.757	0.754	0.715	0.738	0.712	1.368	1.567	1.160
500,000-999,999 ...	2	0.254	0.250	0.226	0.069	0.093	0.137	0.607	0.603	0.605	0.590	0.593	0.608	1.025	1.035	1.038
Under 500,000	9	0.510	0.493	0.422	0.278	0.277	0.281	0.647	0.660	0.714	0.549	0.601	0.625	1.728	1.843	1.318
Percent American Indian/Alaska Native (Quartiles)																
Under 3 percent	4	0.413	0.400	0.418	0.153	0.165	0.184	0.726	0.726	0.728	0.681	0.690	0.682	1.278	1.379	1.125
3-3.8 percent	3	0.526	0.539	0.456	0.171	0.151	0.187	0.664	0.624	0.584	0.224	0.323	0.389	1.208	1.127	1.139
3.8-4.4 percent	2	0.526	0.534	0.469	0.170	0.226	0.275	0.579	0.584	0.600	0.585	0.613	0.547	1.264	1.314	1.286
Over 4.4 percent ...	4	0.379	0.374	0.319	0.218	0.220	0.237	0.606	0.618	0.674	0.621	0.631	0.668	1.580	1.660	1.223
Percent Change (1980-2000) American Indian/Alaska Native (Quartiles)																
Under 88.7 percent .	4	0.517	0.502	0.431	0.187	0.194	0.231	0.684	0.658	0.672	0.524	0.673	0.638	1.278	1.242	1.213
88.7-139.8 percent .	2	0.580	0.549	0.461	0.469	0.435	0.392	0.554	0.562	0.701	0.519	0.527	0.603	2.558	2.818	1.597
139.8-188.3 percent	4	0.288	0.287	0.260	0.076	0.102	0.146	0.610	0.611	0.604	0.557	0.565	0.579	1.034	1.048	1.053
Over 188.3 percent .	3	0.447	0.459	0.463	0.173	0.195	0.205	0.753	0.775	0.769	0.732	0.760	0.728	1.333	1.496	1.147

X Not applicable.

Note: Includes 13 Metropolitan Areas with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. Higher values indicate more segregation; the reference group is White non-Hispanic. Characteristics of metropolitan areas as of 1980. Segregation estimates are weighted by the size of the American Indian and Alaska Native population.

Source: U.S. Census Bureau, Census 1980, 1990, and 2000 Summary File 1.

using other measures, patterns are more mixed.

No obvious pattern was observed between segregation and quartiles of the percent change in the American Indian and Alaska Native population from 1980 to 2000. For example, metropolitan areas with the greatest increase in the American Indian and Alaska Native population (over 188.3 percent) experienced increases in three of the five indexes, and metropolitan

areas with the lowest growth experienced increases in two.

Figures 3-2a through 3-2e show two-decade changes for the individual metropolitan areas. The metropolitan areas near the upper right of the figures are those with higher levels of segregation. Those above the 45-degree line experienced increases in segregation between 1980 and 2000, and those below the line are those that experienced decreases over that

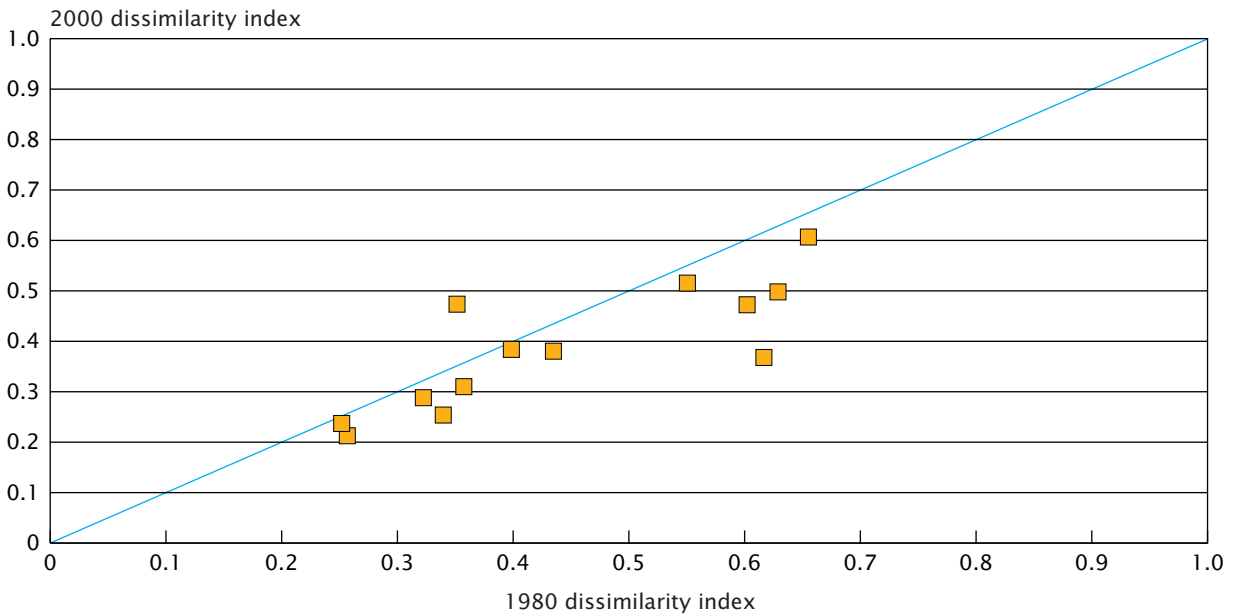
period. The figures show that a great majority of metropolitan areas show only a small change (are clustered near the 45-degree line).⁶ Only the dissimilarity index shows unmistakable signs of declining residential segregation.

Table 3-3 shows the distribution of the percentage change — the proportion of metropolitan areas with

⁶ The analogous figures for 1980 versus 1990 and 1990 versus 2000 are presented in Appendix D.

Figure 3-2a.

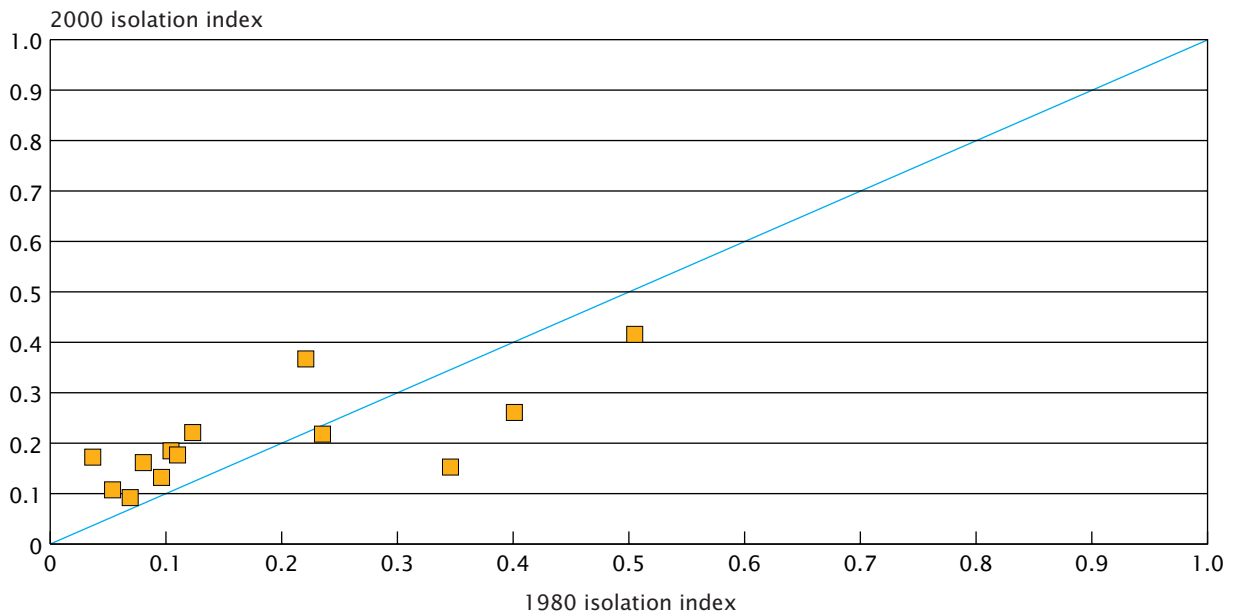
Dissimilarity Index for American Indians and Alaska Natives for Selected Metropolitan Areas: 2000 by 1980



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

Figure 3-2b.

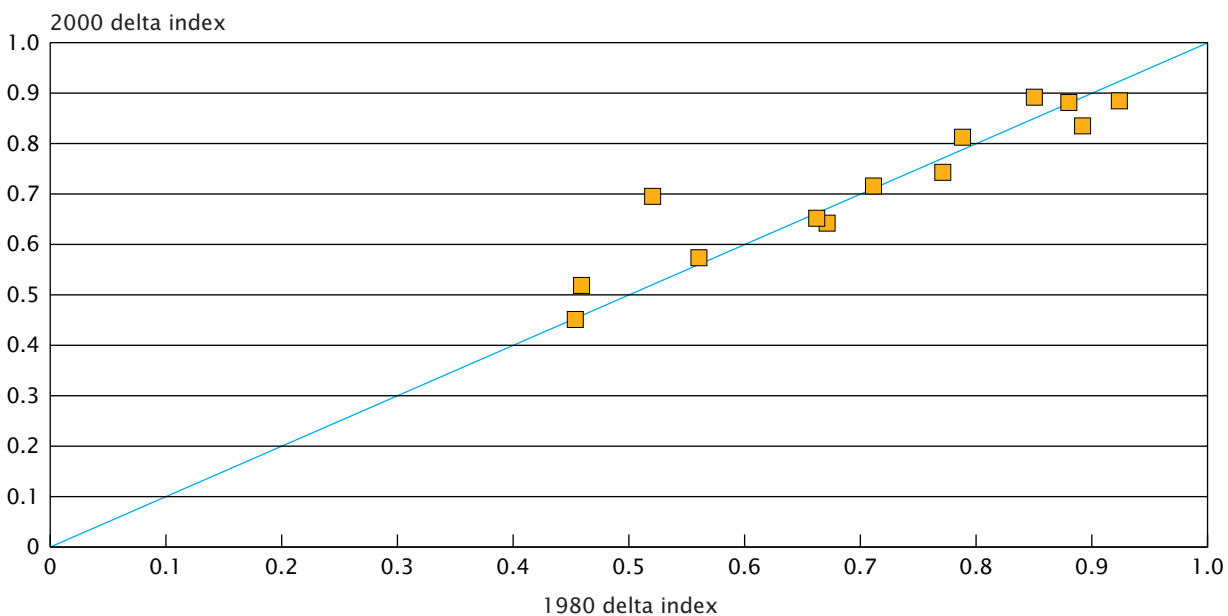
Isolation Index for American Indians and Alaska Natives for Selected Metropolitan Areas: 2000 by 1980



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

Figure 3-2c.

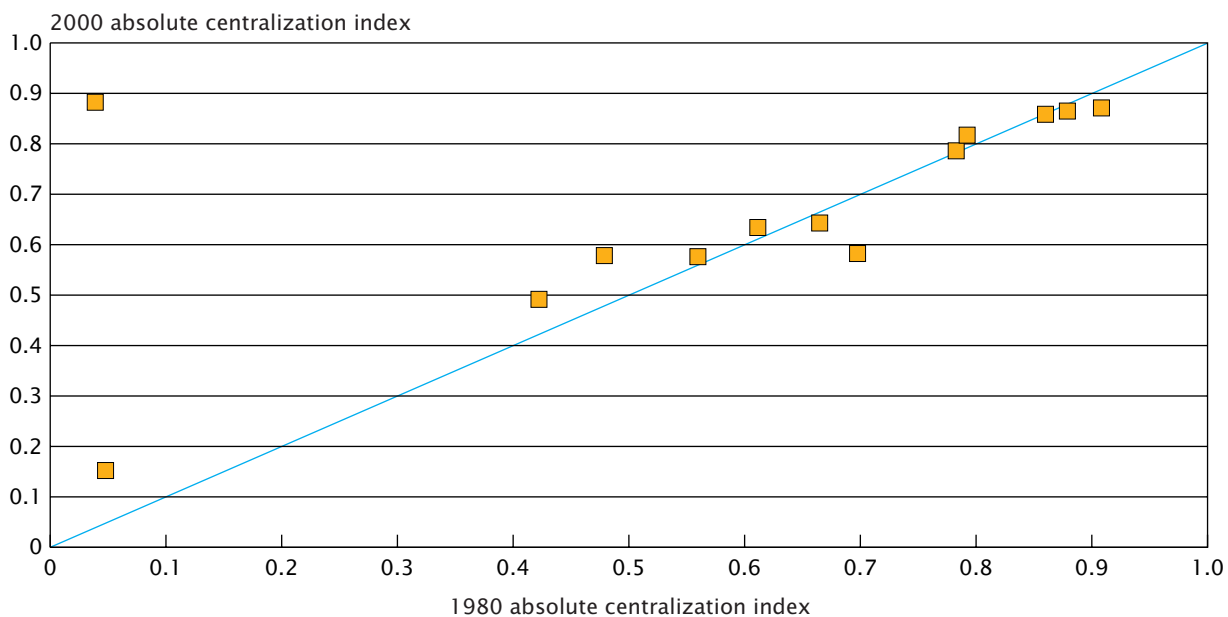
**Delta Index for American Indians and Alaska Natives
for Selected Metropolitan Areas: 2000 by 1980**



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

Figure 3-2d.

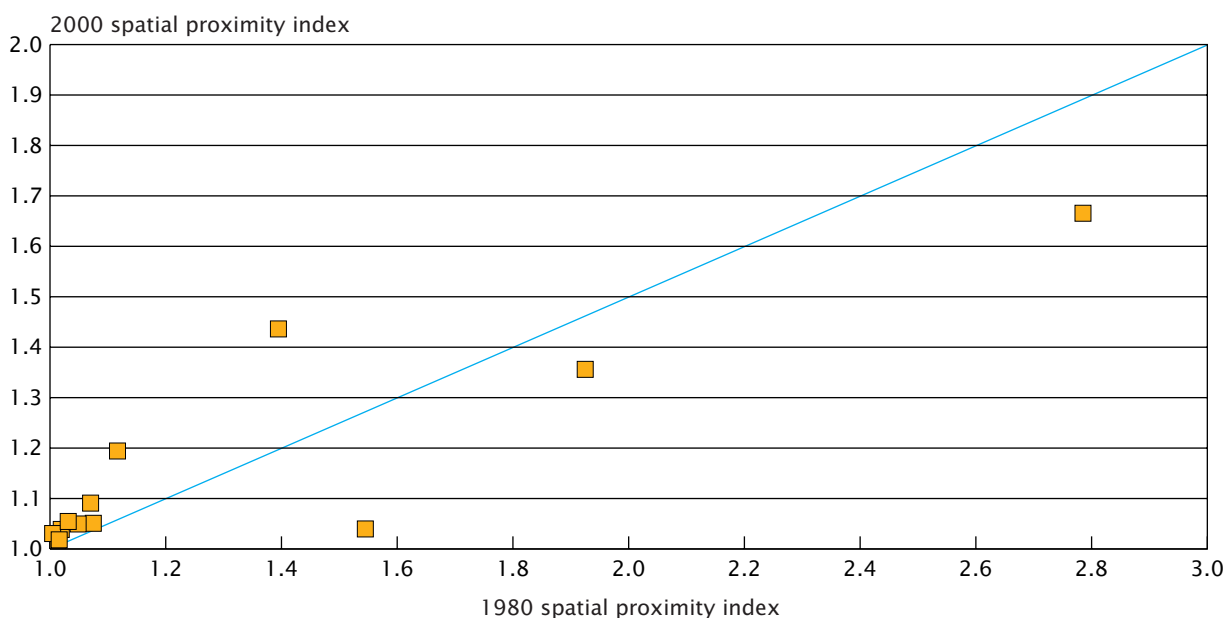
**Absolute Centralization Index for American Indians and Alaska Natives
for Selected Metropolitan Areas: 2000 by 1980**



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

Figure 3-2e.

Spatial Proximity Index for American Indians and Alaska Natives for Selected Metropolitan Areas: 2000 by 1980



Note: Selected metropolitan areas are those with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. The reference group is White non-Hispanic. See Chapter 2 for a discussion of race and Hispanic origin definitions. Source: U.S. Census Bureau, Summary File 1, 1980, 1990, and 2000.

changes in five ranges. This table confirms the mixed message on trends in segregation of the previous analyses. For example, dissimilarity decreased by 5 percent or more between 1980 and 2000 in 11 of the 13 areas, while isolation increased by 5 percent or more over the same period in 9 of the 13 areas.

Table 3-4 presents the levels and Table 3-5 presents the change in each residential segregation index for the 13 metropolitan areas selected for study in this chapter. Each index in Table 3-4 is ranked by their 2000 score to obtain the averaged 2000 ranks. The averaged ranks are then ordered to obtain an overall rank. Similarly in Table 3-5, the 1980-2000 change is ranked for each index to obtain the averaged

1980-2000 change ranks. The averaged 1980-2000 change ranks are then ordered to obtain an overall rank. The rankings indicate highest to lower segregation in ascending order for an MSA/PMSA. Using the dissimilarity index alone, Yakima was the most segregated metropolitan area for American Indian and Alaska Natives in 2000, followed by Fort Smith and Phoenix-Mesa. The least segregated in 2000 was Oklahoma City, followed by Tulsa and Lawton (see Table 3-4). When all five indexes are used to rank the areas, the most segregated is Phoenix-Mesa, followed by Yakima, and then Albuquerque and Rapid City, which are tied. The least segregated in 2000 was Oklahoma City, followed by Lawton and Tulsa. Figures 3-3 and 3-4 show the actual

settlement patterns of Phoenix-Mesa and Oklahoma City, respectively.

Yuma showed the largest decline in dissimilarity, 40 percent, between 1980 and 2000 (see Table 3-5). It also tied in ranking for first overall in reductions, with Great Falls, a difference of one average rank or less from Phoenix-Mesa and Rapid City. Los Angeles-Long Beach showed the biggest (and only) increase in dissimilarity over the 1980 to 2000 period. Overall, Tulsa and Fort Smith showed the greatest increase in residential segregation over the 1980-2000 period (they were tied in average rank), followed by Los Angeles-Long Beach (less than one average rank different).

Table 3-3.

Distribution of Percent Change in Residential Segregation Indexes for American Indians and Alaska Natives: 1980-2000

Time period change	Dissimilarity index		Isolation index		Delta index		Absolute centralization index		Spatial proximity index	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1980-1990										
Increase of 5 percent or more . .	4	31	9	69	1	8	3	23	3	23
Increase of 1-4.99 percent	2	15	0	0	4	31	5	38	5	38
Change of less than 1 percent . .	1	8	0	0	2	15	1	8	4	31
Decrease of 1-4.99 percent	1	8	1	8	6	46	4	31	0	0
Decrease of 5 percent or more . .	5	38	3	23	0	0	0	0	1	8
1990-2000										
Increase of 5 percent or more . .	1	8	10	77	2	15	4	31	0	0
Increase of 1-4.99 percent	0	0	0	0	3	23	2	15	2	15
Change of less than 1 percent . .	0	0	0	0	2	15	2	15	8	62
Decrease of 1-4.99 percent	1	8	1	8	4	31	4	31	1	8
Decrease of 5 percent or more . .	11	85	2	15	2	15	1	8	2	15
1980-2000										
Increase of 5 percent or more . .	1	8	9	69	2	15	4	31	1	8
Increase of 1-4.99 percent	0	0	0	0	3	23	3	23	5	38
Change of less than 1 percent . .	0	0	0	0	3	23	2	15	3	23
Decrease of 1-4.99 percent	1	8	0	0	4	31	3	23	1	8
Decrease of 5 percent or more . .	11	85	4	31	1	8	1	8	3	23

Note: Includes 13 Metropolitan Areas with at least 10 tracts and 3 percent or 20,000 or more American Indians and Alaska Natives in 1980.

Source: U.S. Census Bureau, Census 1980, 1990, and 2000 Summary File 1.

The story of American Indian and Alaska Native residential segregation over the 1980 to 2000 period is a mixed one. The most widely used measure of residential segregation, dissimilarity, indicates a moderate reduction of 6 to

11 percent in segregation in 1980-1990 and again, a moderate reduction of 4 to 10 percent in 1990-2000, both for all metropolitan areas and selected metropolitan areas. Other residential segregation indexes show different

patterns, however, with some indexes showing an increase in segregation. Overall, metropolitan areas in Oklahoma seem the least segregated for American Indian and Alaska Natives.

Table 3-4.
**Residential Segregation for American Indians and Alaska Natives in Selected Metropolitan Areas:
 1980, 1990, and 2000**

MSA/PMSA Name	Dissimilarity index				Isolation index				Delta index				Absolute centralization index				Spatial proximity index				Average 2000 rank	Rank of averaged 2000 rank
	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank		
Albuquerque, NM MSA	0.602	0.562	0.472	5	0.505	0.463	0.416	1	0.521	0.535	0.695	8	0.479	0.494	0.578	10	2.785	3.049	1.666	1	5.0	3
Anchorage, AK MSA	0.322	0.319	0.288	10	0.104	0.128	0.185	6	0.850	0.890	0.892	1	0.879	0.904	0.865	3	1.019	1.035	1.039	10	6.0	6
Bellingham, WA MSA	0.435	0.456	0.380	7	0.235	0.224	0.218	5	0.771	0.759	0.743	6	0.783	0.781	0.786	6	1.070	1.088	1.091	5	5.8	5
Fort Smith, AR-OK MSA	0.551	0.607	0.515	2	0.123	0.177	0.221	4	0.454	0.495	0.451	13	0.048	0.059	0.152	13	1.117	1.178	1.194	4	7.2	8
Great Falls, MT MSA	0.357	0.393	0.310	9	0.069	0.081	0.092	13	0.892	0.895	0.835	4	0.860	0.848	0.859	4	1.014	1.016	1.017	13	8.6	10
Lawton, OK MSA	0.340	0.318	0.254	11	0.096	0.106	0.132	11	0.459	0.442	0.519	12	0.422	0.454	0.492	12	1.075	1.105	1.051	7	10.6	12
Los Angeles-Long Beach, CA PMSA	0.351	0.390	0.474	4	0.037	0.050	0.172	8	0.711	0.703	0.716	7	0.665	0.641	0.643	7	1.005	1.006	1.031	11	7.4	9
Oklahoma City, OK MSA	0.257	0.228	0.213	13	0.054	0.079	0.107	12	0.671	0.658	0.642	10	0.560	0.583	0.576	11	1.016	1.016	1.018	12	11.6	13
Phoenix-Mesa, AZ MSA	0.629	0.566	0.498	3	0.401	0.349	0.261	3	0.788	0.808	0.813	5	0.792	0.828	0.817	5	1.925	2.089	1.356	3	3.8	1
Rapid City, SD MSA	0.398	0.399	0.384	6	0.110	0.132	0.177	7	0.924	0.918	0.885	2	0.908	0.899	0.871	2	1.049	1.053	1.050	8	5.0	3
Tulsa, OK MSA	0.252	0.270	0.237	12	0.080	0.107	0.161	9	0.561	0.552	0.574	11	0.611	0.603	0.634	8	1.031	1.054	1.055	6	9.2	11
Yakima, WA MSA	0.655	0.667	0.607	1	0.221	0.299	0.367	2	0.662	0.671	0.652	9	0.698	0.711	0.582	9	1.395	1.442	1.436	2	4.6	2
Yuma, AZ MSA	0.617	0.428	0.368	8	0.346	0.139	0.153	10	0.880	0.858	0.881	3	0.039	0.870	0.882	1	1.545	1.039	1.040	9	6.2	7

Note: Includes 13 Metropolitan Areas with 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. Higher values indicate more segregation; the reference group is White non-Hispanic.

Source: U.S. Census Bureau, Census 1980, 1990, and 2000 Summary File 1.

Table 3-5.
**Percent Change in Residential Segregation Indexes for American Indians and Alaska Natives in Metropolitan Areas:
 1980-2000**

MSA/PMSA name	Dissimilarity index				Isolation index				Delta index				Absolute centralization index				Spatial proximity index				Rank of change ranks averaged
	1980-1990 percent change	1990-2000 percent change	1980-2000		1980-1990 percent change	1990-2000 percent change	1980-2000		1980-1990 percent change	1990-2000 percent change	1980-2000		1980-1990 percent change	1990-2000 percent change	1980-2000		1980-1990 percent change	1990-2000 percent change	1980-2000		
			Percent change	Rank			Percent change	Rank			Percent change	Rank			Percent change	Rank					
Albuquerque, NM MSA . .	-6.7	-15.9	-21.5	11	-8.3	-10.2	-17.7	11	2.8	29.9	33.6	1	3.1	17.2	20.8	3	9.5	-45.4	-40.2	13	7
Anchorage, AK MSA . . .	-1.0	-9.7	-10.6	6	22.6	44.4	77.1	5	4.7	0.2	4.9	3	2.9	-4.3	-1.6	10	1.6	0.3	1.9	6	4
Bellingham, WA MSA . . .	4.8	-16.5	-12.5	7	-4.7	-2.7	-7.3	10	-1.6	-2.1	-3.7	10	-0.2	0.7	0.4	8	1.7	0.3	1.9	5	9
Fort Smith, AR-OK MSA .	10.2	-15.0	-6.4	4	43.8	24.9	79.6	4	9.0	-8.8	-0.5	8	22.7	159.5	218.4	2	5.5	1.3	6.9	1	1
Great Falls, MT MSA . . .	9.9	-21.0	-13.2	8	16.6	14.3	33.3	9	0.4	-6.7	-6.4	13	-1.4	1.2	-0.2	9	0.2	0.0	0.3	7	12
Lawton, OK MSA	-6.2	-20.3	-25.3	12	10.0	24.9	37.4	8	-3.7	17.4	13.0	2	7.4	8.4	16.4	4	2.9	-4.9	-2.2	10	6
Los Angeles-Long Beach, CA PMSA	10.8	21.6	34.7	1	35.4	246.2	368.9	1	-1.2	1.9	0.6	6	-3.6	0.3	-3.3	11	0.1	2.5	2.6	3	3
Oklahoma City, OK MSA	-11.1	-6.8	-17.1	9	46.2	36.4	99.5	3	-2.0	-2.4	-4.3	12	4.2	-1.2	3.0	7	0.0	0.2	0.2	8	7
Phoenix-Mesa, AZ MSA . .	-10.1	-12.0	-20.8	10	-13.0	-25.2	-34.9	12	2.5	0.6	3.1	4	4.6	-1.3	3.2	6	8.5	-35.1	-29.6	11	11
Rapid City, SD MSA	0.2	-3.8	-3.6	2	20.1	33.7	60.6	7	-0.7	-3.6	-4.2	11	-1.0	-3.1	-4.1	12	0.4	-0.3	0.1	9	10
Tulsa, OK MSA	7.2	-12.2	-5.8	3	33.0	50.9	100.8	2	-1.5	3.9	2.3	5	-1.4	5.2	3.7	5	2.2	0.1	2.2	4	1
Yakima, WA MSA	1.8	-9.0	-7.4	5	35.4	22.7	66.2	6	1.2	-2.8	-1.6	9	1.9	-18.1	-16.5	13	3.4	-0.4	3.0	2	5
Yuma, AZ MSA	-30.6	-14.0	-40.3	13	-59.8	9.9	-55.9	13	-2.5	2.7	0.1	7	2136.1	1.4	2167.8	1	-32.8	0.1	-32.7	12	12

Note: Includes 13 Metropolitan Areas with 3 percent or 20,000 or more American Indians and Alaska Natives in 1980. Higher values indicate more segregation; the reference group is White non-Hispanic.

Source: U.S. Census Bureau, Census 1980, 1990, and 2000 Summary File 1.

Figure 3-3.

**The Most Segregated Metropolitan Area for American Indians and Alaska Natives in 2000:
Phoenix-Mesa, AZ MSA**

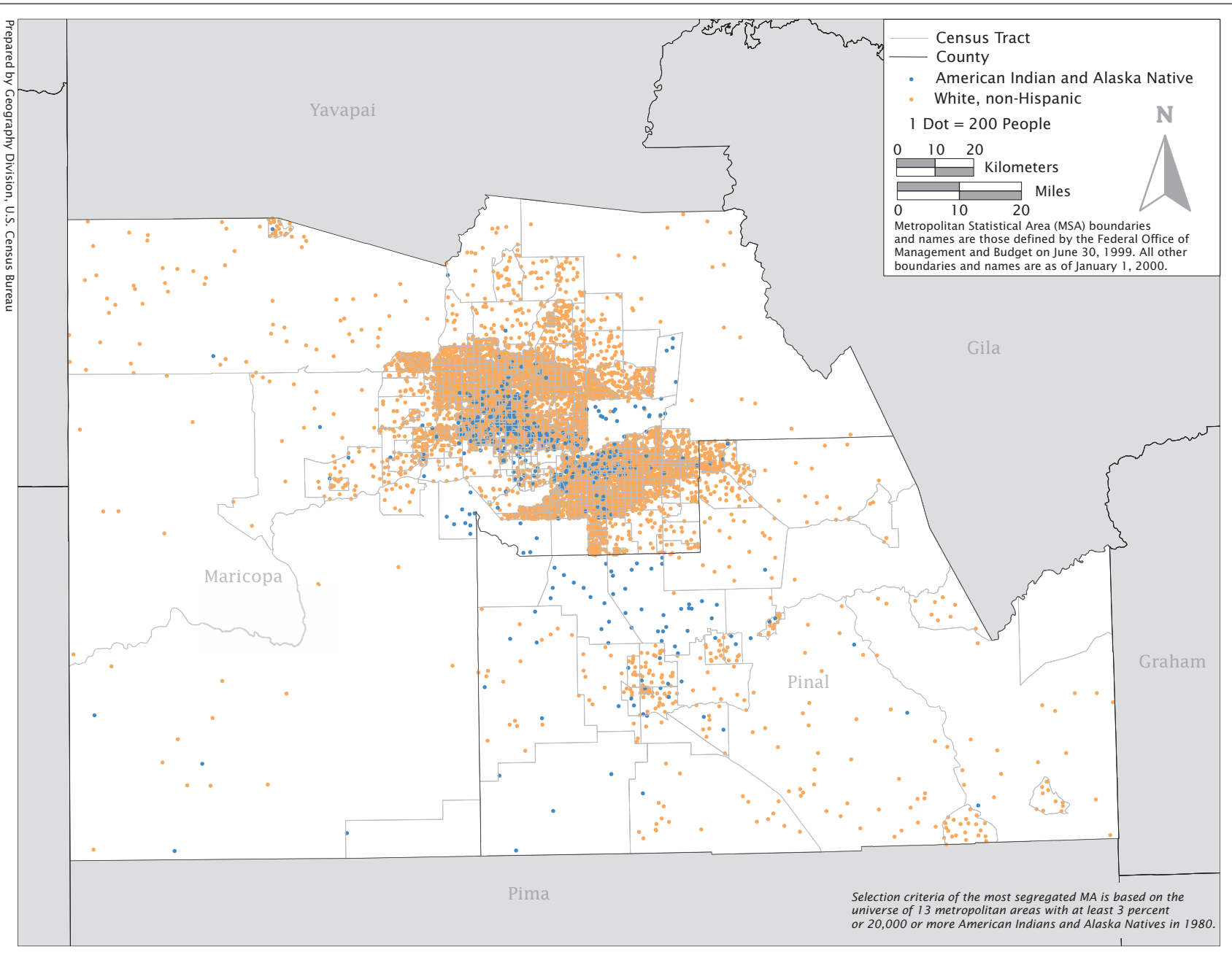


Figure 3-4.

**The Least Segregated Metropolitan Area for American Indians and Alaska Natives in 2000:
Oklahoma City, OK MSA**

